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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,229	11/13/2001	Matthew S. Chang	50P4161	8691

22242 7590 03/21/2006

FITCH EVEN TABIN AND FLANNERY  
120 SOUTH LA SALLE STREET  
SUITE 1600  
CHICAGO, IL 60603-3406

EXAMINER
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SHANG, ANNAN Q

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/053,229

Applicant(s)

CHANG ET AL.

Examiner

Annan Q. Shang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sharrit et al (6,185,205)** in view of **Shaffer (5,673,253)**.

As to claim 1, note the **Shaffer** reference figure 1, discloses an apparatus (Information Transfer System 'ITS' 10) for allocating data streams for use by a plurality of consumer electronic devices (User Device 'UD' 34), comprising:

External-side data ports (Antenna Port 24a-n, 26a-n, 30, figs.1 and col.2, line 46-col.3, line 2) for transferring data (video, voice and data) between a plurality of external bandwidth channels and the apparatus (ITS-10);

One or more user ports (User interface port 22) for bidirectional data transfer between the apparatus (ITS-10) and at least one end-user device (UD-34, col.4, lines 18-27); the end-user device sending a data request for data to be transferred from the external source (25a-n, 28a-n and 32);

Determining means (Controller 18, col.4, lines 17-45) for determining the means for executing the data request on the basis of the external source and the available bandwidth for each of the external bandwidth channels currently connected to the external-side data ports (col.5, line 51-col.6, line 4), note that controller 18 can

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determine particular communications channel is noisy and change a bandwidth value of an IF filter to compensate and retrieves via the external sources, the data requested by the user of UD-34; and

A switch (Switch 16, col.4, lines 17-45) for connecting the requesting end-user device to the external bandwidth channels determined by the determining means such that the data request is sent to the external source and the data is transferred accordingly.

Sharrit fails to explicitly teach a plurality of user devices and determining means for executing the request on the basis of the external source and the available bandwidth for each of the external bandwidth channels currently connected to the external-side data ports.

However, note the **Shaffer** reference figure 1, discloses dynamic allocation of telecommunications resources where a user unit includes a plurality of devices (User Units 18, 20 and 22) connected to external channel sources (col.4, line 51-col.5, line 4) and determines available bandwidth for each of the external bandwidth channels currently connected to the external data ports (col.5, lines 5-25, line 50-col.6, line 19 and line 56-col.7, line 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Shaffer into the system Sharrit to dynamically monitor home network devices and assign bandwidth dynamically based on requests made by each device, in order to efficiently make use of the available bandwidth.

As to claim 2, Sharrit further disclose where the external-side data ports, include connections for downloading-only and bi-directional external bandwidth channels (col.3, lines 19-40 and col.7, line 45-col.8, line 9).

As to claim 3, Sharrit further disclose that ITS-10 can be used as a home gateway such as a STB (col.2, lines 41-45).

Claims 4-5 are met as previously discussed with respect to claim 1.

As to claim 6, note the **Shaffer** reference figure 1, discloses a method for efficient data transfer through a set-top-box (Information Transfer System 'ITS' 10) between a plurality of external sources (Antenna Port 24a-n, 26a-n) and at least one end-user device (User Device 'UD' 34), comprising

External-side data ports (Antenna Port 24a-n, 26a-n, 30, figs.1 and col.2, line 46-col.3, line 2) for transferring data (video, voice and data) between a plurality of external bandwidth channels and the apparatus (ITS-10);

One or more user ports (User interface port 22) for bidirectional data transfer between the apparatus (ITS-10) and at least one end-user device (UD-34, col.4, lines 18-27); the end-user device sends a data request for data to be transferred from the external source (25a-n, 28a-n and 32);

Determining means (Controller 18, col.4, lines 17-45) for determining the means for executing the data request on the basis of the external source and the available bandwidth for each of the external bandwidth channels currently connected to the external-side data ports (col.5, line 51-col.6, line 4), note that controller 18 can determine particular communications channel is noisy and change a bandwidth value of

an IF filter to compensate and retrieves via the external sources, the data requested by the user of UD-34; and

A switch (Switch 16, col.4, lines 17-45) for connecting the requesting end-user device to the external bandwidth channels determined by the determining means such that the data request is sent to the external source and the data is transferred accordingly.

Sharrit fails to explicitly teach a plurality of user devices and determining means for executing the request on the basis of the external source and the available bandwidth for each of the external bandwidth channels currently connected to the external-side data ports.

However, note the **Shaffer** reference figure 1, discloses dynamic allocation of telecommunications resources where a user unit includes a plurality of devices (User Units 18, 20 and 22) connected to external channel sources (col.4, line 51-col.5, line 4) and determines available bandwidth for each of the external bandwidth channels currently connected to the external data ports (col.5, lines 5-25, line 50-col.6, line 19 and line 56-col.7, line 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Shaffer into the system Sharrit to dynamically monitor home network devices and assign bandwidth dynamically based on requests made by each device, in order to efficiently make use of the available bandwidth.

Claim 7 is met as previously discussed with respect to claim 2.

Claim 8 is met as previously discussed with respect to claim 3.

Claim 9 is met as previously discussed with respect to claims 4-5.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Noritomi (6,473,902) discloses method for transmitting programs.

Rakib et al (6,889,385) disclose home network for receiving VOD and other requested programs and services.

Kou et al (6,907,301) disclose method and system for selecting and controlling devices in a home network.

Billerbeck et al (6,844,895) disclose wireless intelligent host imaging audio and data receiver.

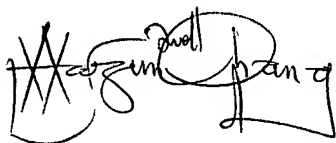
Bucher (6,678,737) discloses home network appliance and method.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Annan Q. Shang'. The signature is stylized with large, flowing loops and a prominent 'S' shape.

**Annan Q. Shang.**